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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/660,389	09/11/2003	Abtar Singh	5264-003COB	6934
27572	7590	03/29/2004	EXAMINER	
HARNESS, DICKEY & PIERCE, P.L.C. P.O. BOX 828 BLOOMFIELD HILLS, MI 48303			BARBEE, MANUEL L	
			ART UNIT	PAPER NUMBER
			2857	

DATE MAILED: 03/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/660,389	SINGH ET AL.	
	Examiner	Art Unit	
	Manuel L. Barbee	2857	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 09 January 2004.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-5,7,8,11-14,16,18 and 21-32 is/are rejected.
- 7) Claim(s) 6,9,10,15,17,19 and 20 is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 11 September 2003 is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 9 January 2004.
- 4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: _____.

DETAILED ACTION

Claim Objections

1. Claims 19 and 20 are objected to because of the following informalities: Claim 19, lines 3 and 4 contain limitations for "said plurality of product types within said plurality of refrigeration cases." Claim 20 contains similar limitations on lines 3 and 4. The claims lack antecedent basis for a plurality of product types and a plurality of refrigeration cases. Either claim 18 or claims 19 and 20 should be amended to correct this informality. Appropriate correction is required.

Double Patenting

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claims 24 and 25 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 and 2 of U.S. Patent No. 6,668,240 in view of Henderson. Although the conflicting claims are not identical, they are not patentably distinct from each other because claims 24 and 25 contain all the limitations of claims 1 and 2, respectively, in the '240 patent, except the

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teaching of a management center in communication with a remote location. The processing center of claim 23 upon which claims 24 and 25 depend is the equivalent of the management center in claims 1 and 2 of the '240 patent. Claims 24 and 25 do not specifically state that the processing center is communicating with a remote location. Henderson teach a hazardous condition monitoring system that includes a communication network that can communicate both local and remote alarm indications using the existing communication network (col. 1, line 58 - col. 2, line 14). It would have been obvious to one of ordinary skill at the time the invention was made to modify the monitoring system, as taught in the '240 patent, to include using the communication network to monitor remote and local locations, as taught by Henderson, because then a plurality of refrigeration cases at local or remote locations would have been monitored.

4. A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

5. Claims 29 and 30 are rejected under 35 U.S.C. 101 as claiming the same invention as that of claims 7 and 8 of prior U.S. Patent No. 6,668,240. Claims 7 and 8 of the '240 patent contain limitations for providing a communication network and a processing center. Since claims 29 and 30 of the present invention contain limitations for transmitting information to a processing center using a communication network,

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providing a communication network and a processing center would have been inherent.

This is a double patenting rejection.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 23, 26-28, 31 and 32 are rejected under 35 U.S.C. 102(b) as being anticipated by Regennitter et al. (US Patent No. 4,278,841).

With regard to transmitting information from a refrigeration system at a retail location to a processing center using a communication network, as shown in claims 23 and 28, Regennitter et al. teach a plurality of detector units in frozen food display cases for sensing the air temperature and sending the information to a receiver unit remote from the detector unit which can send an alarm using a telephone (col. 1, lines 64 - col. 2, line 60; col. 3, line 48 - col. 4, line 63). With regard to determining a food product index for a plurality of product types, as shown in claims 23 and 28, Regennitter et al. teach detecting temperature (col. 3, lines 55-65). Since the food condition is dependent upon temperature it is a food product index (col. 1, lines 11-24).

With regard to initiating an alarm if the food product index exceeds a predetermined level, as shown in claim 26 and 31, and initiating the alarm at either the management center or the remote location, as shown in claims 27 and 32, Regennitter

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et al. teach initiating an alarm at an alarm unit and sending the alarm using the telephone (col. 3, lines 55-65; col. 4, lines 43-63).

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 1, 3-5, 18, 21 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over O'Brien (US Patent No. 4,024,495) in view of Chiu et al. (US Patent No. 4,604,871).

With regard to a communication network and a food product manager in communication with a monitored location to receive product temperature information using the communication network and determine a food characteristic, as shown in claims 1 and 18, O'Brien teaches a remote temperature change warning system that allows communication between a temperature sensor and a detection circuit remote from the sensor (Abstract, col. 1, line 55 - col. 2, line 66). The temperature is the food characteristic. O'Brien does not teach determining a food characteristic as a function of a frequency and severity of product-temperature information, as shown in claims 1 and 18.

Chiu et al. teach an over-temperature warning system for a refrigerator that includes two temperature thresholds and a time threshold for each temperature threshold (Abstract; col. 3, lines 5-49). The time thresholds are related to the frequency

of an over-temperature condition and the two thresholds recognize that higher or more severe over-temperature conditions can cause food damage in a shorter amount of time (col. 3, lines 5-49). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the remote temperature change warning system, as taught by O'Brien to include two temperature and time thresholds, as taught by Chiu et al., because then the warning system would not respond to temporary over temperature conditions (Chiu et al., col. 2, lines 40-51).

O'Brien do not teach a time-temperature calculation including time and temperature set points for alarm points, as shown in claims 3 and 4. O'Brien do not teach a degree-minute calculation, as shown in claim 5. Chiu et al. teach having time and temperature thresholds for over-temperature conditions that trigger alarms (col. 3, lines 5-49). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the remote temperature change warning system, as taught by O'Brien to include time and temperature thresholds, as taught by Chiu et al., because then the warning system would not respond to temporary over temperature conditions (Chiu et al., col. 2, lines 40-51).

With regard to initiating an alarm if the food product index exceeds a predetermined level at either the management center or the remote location, as shown in claims 21 and 22, O'Brien teaches initiating an alarm at the refrigeration trailer (col. 8, lines 5-19).

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10. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over O'Brien in view of Chiu et al. as applied to claim 1 above, and further in view of Tershak et al. (US Patent No. 4,834,169).

O'Brien and Chiu et al. teach all the limitations of claim 1 upon which claim 2 depends. O'Brien and Chiu et al. do not teach that the product-temperature condition is cyclical, as shown in claim 2. Tershak et al. teach that the temperature in a refrigerator is cyclical (col. 5, line 42 - col. 6, line 23; fig. 5A). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the warning system, as taught by O'Brien and Chiu et al., to include a refrigerator where the product-temperature cycle is cyclical, as taught by Tershak et al., because then it would have been used on conventional refrigerators that allow the compressor to be turned off periodically (Tershak et al., col. 1, lines 14-36).

11. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over O'Brien in view of Chiu et al. as applied to claim 1 above, and further in view of Nioras (US Patent No. 4,340,610).

O'Brien and Chiu et al. teach all the limitations of claim 1 upon which claim 7 depends. O'Brien and Chiu et al. do not teach that the function is a bacteria-count calculation, as shown in claim 7. Nioras teaches making bacteria count measurements for food using temperature and time (col. 1, lines 16-25). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the warning system combination, as taught by O'Brien and Chiu et al., to include bacteria count

calculations, as taught by Nioras, because then it would have been known whether the food was safe for eating.

12. Claims 7, 8, 11-14 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over O'Brien in view of Chiu et al. as applied to claim 1 above, and further in view of Starling et al. (US Patent No. 6,609,078).

O'Brien and Chiu et al. teach all the limitations of claim 1 upon which claims 7, 8, 11-14 and 16 depend. O'Brien and Chiu et al. do not teach that the function is a bacteria count calculated for a given temperature at a given time, as shown in claims 7 and 8. O'Brien and Chiu et al. do not teach separately counting both spoiler bacteria and pathogen bacteria and generating an alarm when spoiler bacteria or pathogen bacteria reaches a predetermined level or generating a food quality index or food safety index, as shown in claims 11-14 and 16. Starling et al. teaches calculating a food safety index (FSI) corresponding to pathogen bacteria risk levels and a food quality index (FQI) related to spoiler bacteria risk and generating alarms in response to predetermined levels of either index (col. 4, lines 12-21, col. 6, lines 34-45; col. 3, lines 23-34; col. 5, lines 1-13). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the warning system combination, as taught by O'Brien and Chiu et al., to include calculating FSI and FQI and using alarms when these calculations are too high, as taught by Starling et al., because then food would have been safer from spoilage and bacteria that cause health problems (Starling et al., col. 3, lines 23-33; col. 5, lines 1-14).

Allowable Subject Matter

13. Claims 6, 9, 10, 15 and 17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Reber et al. (US Patent No. 5,969,606) teach monitoring a food item.

Vidaillac (US Patent No. 6,034,607) teaches a refrigeration unit temperature alarm.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Manuel L. Barbee whose telephone number is 571-272-2212. The examiner can normally be reached on Monday-Friday from 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marc S. Hoff can be reached on 571-272-2216. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

mlb


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